

# DESIGNING METHODS AND CIRCUITS FOR MULTI-BAND ELECTRONIC CIRCUITS

## ABSTRACT OF THE DISCLOSURE

The designing method and circuits for a multi-band electronic circuit having at least one transistor have been proposed. The proposed method includes steps of: (a) changing the capacitance between the input terminal and the output terminal of the transistor of the circuit, and (b) obtaining the resonant frequency of the circuit in response to the changed capacitance for switching among multiple bands. The designing method and circuits for a multi-band amplifier, which includes at least one transistor having an input terminal and an inductor electrically connected to the input terminal of the transistor, have been proposed too. The designing method for a multi-band amplifier includes steps of: changing the bias of the transistor, and switching the resonant frequency of the input impedance of the transistor and the inductor in response to the changed bias for switching among multiple bands.